

WHAT IS CLAIMED IS:

1. An ink set for inkjet recording for forming a black image portion in a color image with a black ink and a color ink, wherein the black ink comprises at least cationic or anionic self-dispersible carbon black and the color ink comprises at least a substance having an opposite polarity to that of the self-dispersible carbon black.
2. The ink set for inkjet recording according to claim 1, wherein the self-dispersible carbon black is cationic and the color ink comprises at least an anionic substance.
3. The ink set for inkjet recording according to claim 1, wherein the carbon black is contained in an amount of 0.1 to 20% by mass relative to a total amount of the ink containing the black ink.
4. The ink set for inkjet recording according to claim 1, wherein the black ink and/or the color ink contain a surfactant, and the surfactant is present in an amount of 0.001 to 5% by mass relative to the amount of the black ink and the amount of the color ink, respectively.
5. The ink set for inkjet recording according to claim 1, wherein the black ink comprises a compound represented by formula (1):



wherein R is a functional group having 4 to 8 carbon atoms selected from the group consisting of an alkyl group, an alkenyl group,

an alkynyl group, a phenyl group, an alkylphenyl group, an alkenylphenyl group and a cycloalkyl group; X is an oxyethylene group or an oxypropylene group; and n is an integer from 1 to 4.

6. A method for inkjet recording comprising:
recording a color image in accordance with recording signals by ejecting from an orifice a black ink and a color ink, wherein the black ink comprises at least cationic or anionic self-dispersible carbon black and the color ink comprises at least a substance having an opposite polarity to that of the self-dispersible carbon black, and wherein a black image portion in the color image is formed with the black ink and the color ink, and a time lag between ejecting of the black ink and ejecting of the color ink is 20 ms or less.
7. The method for inkjet recording according to claim 6, wherein the self-dispersible carbon black is cationic and the color ink comprises at least an anionic substance.
8. The method for inkjet recording according to claim 6, wherein the order of ejecting the black ink and ejecting the color ink changes.
9. The method for inkjet recording according to claim 6, wherein the carbon black is contained in an amount of 0.1 to 20% by mass relative to a total amount of the ink containing the black ink.

10. The method for inkjet recording according to claim 6, wherein the black ink and/or the color ink contain a surfactant, and the surfactant is present in an amount of 0.001 to 5% by mass relative to the amount of the black ink and the amount of the color ink, respectively.

11. The method for inkjet recording according to claim 6, wherein the black ink comprises a compound represented by formula (1):



wherein R is a functional group having 4 to 8 carbon atoms selected from the group consisting of an alkyl group, an alkenyl group, an alkynyl group, a phenyl group, an alkylphenyl group, an alkenylphenyl group and a cycloalkyl group; X is an oxyethylene group or an oxypropylene group; and n is an integer from 1 to 4.

12. An apparatus for inkjet recording for forming a color image comprising:
at least an ink cartridge for ejecting a black ink and another ink cartridge for ejecting a color ink, wherein the black ink comprises at least cationic or anionic self-dispersible carbon black and the color ink comprises at least a substance having an opposite polarity to that of the self-dispersible carbon black, and wherein a black image portion in the color image is formed with the black ink and the color ink, and a time lag between ejecting of the black ink and ejecting of the color ink is 20 ms or less.

13. The apparatus for inkjet recording according to claim 12, wherein the self-dispersible carbon black is cationic and the color ink comprises at least an anionic substance.

14. The apparatus for inkjet recording according to claim 12, wherein recording is carried out by reciprocal scanning of the ink cartridge for ejecting a black ink and the another ink cartridge for ejecting a color ink, and the order of ejecting the black ink and ejecting the color ink changes by the reciprocal scanning.

15. The apparatus for inkjet recording according to claim 12, wherein the carbon black is contained in an amount of 0.1 to 20% by mass relative to a total amount of the ink containing the black ink.

16. The apparatus for inkjet recording according to claim 12, wherein the black ink and/or the color ink contain a surfactant, and the surfactant is present in an amount of 0.001 to 5% by mass relative to the amount of the black ink and the amount of the color ink, respectively.

17. The apparatus for inkjet recording according to claim 12, wherein the black ink comprises a compound represented by formula (1):



wherein R is a functional group having 4 to 8 carbon atoms selected from the group consisting of an alkyl group, an alkenyl group, an alkynyl group, a phenyl group, an alkylphenyl group, an alkenylphenyl group and a cycloalkyl group; X is an oxyethylene group or an oxypropylene group; and n is an integer from 1 to 4.